Technical Report 1258

Social Awareness and Leader Influence: Development of Classroom and Web-Based Learning Interventions

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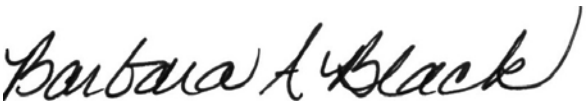

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14. ABSTRACT *(Maximum 200 words)*:
This research entailed developing and testing a detailed program of instruction to help Army leaders improve their social awareness and influence skills. Based on input from Soldier subject matter experts and the behavioral sciences literature, two training programs were developed: a six-hour classroom course and a parallel web-based course. Additionally, four assessments were created: a Social Awareness and Influence Skills Self-assessment to assess self-perceptions of skills, a knowledge test to assess learning in the course, a situational judgment test (SJT) to assess the students' ability to apply social insight and judgment to interpersonal situations, and a web-based role-play to assess the students' ability to apply influence tactics. These courses and assessments were then subsequently tested in two pilot samples. Results of the participant reactions questionnaire indicated that the training programs in both the classroom and web-based formats were well received by the target audience and that participants gained new knowledge as a result of the course. Results also indicated promise for the measures piloted in this project. The outcomes of this effort include a fully developed classroom-based POI and a companion prototype web-based POI that are suitable for first-line Army leaders (E4 to E6 and O1 to O3).

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First, we would like to recognize Mr. Kip Mendini, Major Eric LeGloahec, and Major Brian Bornick at United States John F. Kennedy Special Warfare Center and School for their assistance in coordinating pilot testing for the WBT course.

We would also like to thank the staff members of PDRI, ICF International, and Solutions for Information Design (SOLID) who contributed to this project, most notably Ms. Anna Caldwell, Mr. Tom Caldwell, Ms. Valerie Schultz, Mr. Mike Ford, Mr. Gonzalo Ferro, Mr. Kevin Smith, Ms. Courtney Morewitz, Ms. Lindsey Firme, Ms. Nora Grace Awkerman, Dr. Arnold Leonard, and Ms. Jessie Huang. These individuals were instrumental in helping to develop and pilot test the training content.

Dr. Alma Abdul-Hadi Jadallah served as our Middle-Eastern regional and cultural expert, and her extensive review of the Mukhtar role-play is greatly appreciated. Dr. Jadallah's insights were invaluable in ensuring our material was culturally relevant and appropriate.

We are also enormously grateful to the actors who appeared in our videos. Specifically, we owe a debt of thanks to Mr. Bassel Abdul-Hadi as the Mukhtar in the web-based role-play and Mr. Kevin Smith and Mr. Gonzalo Ferro who played the Soldiers in the situational judgment test video. These gentlemen showed good humor and great talent in their acting debuts.

Finally, our heartfelt appreciation goes out to the numerous Army officers and NCOs who participated in pilot testing the training content. The feedback and insights from all of the pilot participants is very much appreciated and has helped to greatly improve the training content.

SOCIAL AWARENESS AND LEADER INFLUENCE: DEVELOPMENT OF CLASSROOM AND WEB BASED LEARNING INTERVENTIONS

EXEUTIVE SUMMARY

Research Requirements:

In the current operational environment, the need for socially-aware and influential leaders at all levels in the military has become increasingly apparent. However, little formal training exists to help new Army leaders enhance these skills. To address this training gap, the Ft. Leavenworth Research Unit of ARI (ARI-FLRU) initiated research in May of 2005 on the topic of "Social Awareness and Influence on Others." The goal of this initial research was to develop a training concept that would accelerate leader development through exposure to structured experiences in self-awareness, self-modulation, and techniques to enhance leader social influence supported by real-time measurement, coaching, and feedback.

In support of this goal, an extensive literature review was conducted to develop and document a model of social awareness and influence based on an analysis of relevant research. Using the model as a guide, training concepts were pilot tested to address linkages in the model. The results from this effort were then summarized in a technical report that provides preliminary evidence of the efficacy of the social awareness and influence training concepts (Mueller-Hanson, Swartout, Morewitz, Keil, McGonigle, Martin, Parish, & Morath, 2007).

As described in this report, ARI-FLRU initiated a follow-on research project to extend understanding of the social awareness and influence process and to provide refined tools to support Army leader development. The objectives of this follow-on work, then, were to develop a more comprehensive and detailed program of instruction; initiate a web-based platform program of instruction to train and enhance self-awareness, self-regulation, and social influence skills; and to evaluate the program and provide a detailed proof of concept and design for web implementation as a program of instruction.

Procedure:

Based on input from Soldier subject matter experts and the behavioral sciences literature, two major training programs were developed: a six-hour classroom course and a parallel web-based course. Additionally, four assessments were created: a Social Awareness and Influence Skills Self-assessment to assess self-perceptions of skills in these areas, a knowledge test to assess learning in the course, a situational judgment test (SJT) to assess the students' ability to apply social insight and judgment to interpersonal situations, and a web-based role-play to assess the students' ability to apply influence tactics. These courses and assessments were then subsequently tested in two pilot samples.

The first sample consisted of 48 Soldiers (18 officers and 30 enlisted personnel) from location 1 who participated in the classroom course. Classroom assessments included the self-assessment and SJT. Half the participants completed the SJT before the training, and half

completed the SJT at the end of the training. The second sample consisted of 41 officers at location 2 who participated in the web-based course; this sample participated in this project as part of their training. The second sample was further divided into two groups: a control group and a training group. The control group was asked to complete all four assessments followed by the training course, and the training group completed the training course first, followed by the assessments. Evaluation data were collected at two levels to assess the effectiveness of the training: participant reactions (level 1) and acquisition of new knowledge and skills (level 2). The level 1 evaluation was conducted using a survey administered at the end of each training session. The level 2 evaluation consisted of the scores on the applicable assessments.

Findings:

Results of the participant reactions questionnaire indicate that the training programs in both the classroom and web-based formats were well received by the target audience and that participants gained new knowledge as a result of the course. In the web-based instruction sample, individuals in the training condition scored significantly higher on the knowledge test than individuals in the control group. However, differences in situational judgment test scores (for either the classroom or the web-based samples) and role-play scores were not significant between the two conditions in the web-based instruction sample. Given that significant improvements were observed in role-play performance before and after the training in earlier classroom pilot tests (Mueller-Hanson, et al., 2007), one possible conclusion from this finding is that a short online training program is not sufficient for building new skills, but it is useful in developing knowledge. Therefore, web-based training such as the program developed for this project may be most useful as pre-work to prepare students for more intensive, scenario-based training in a classroom setting, which is a better forum for building skills.

Results also indicated promise for the piloted measures. The self-report measure was a reliable indicator of perceived social awareness and influence skills, and this measure was correlated with performance on the situational judgment test. In the web-based instruction sample, performance on the situational judgment test correlated with performance on the automated role-play. As these measures were prototype instruments, more research is needed to validate these results with external performance.

Utilization and Dissemination of Results:

The outcomes of this effort include a fully developed classroom-based POI and a companion prototype web-based POI that are suitable for first-line Army leaders (E4 to E6 and O1 to O3). While the classroom course has been thoroughly tested and is ready for dissemination, the web-based training program and assessments are prototypes and could benefit from further enhancements, as suggested via feedback from Soldiers. Specifically, the training program could be enhanced by including more activities, more animation, and more audio. The role-play assessment could benefit from including a coach avatar that would provide guidance and feedback throughout the assessment and a debriefing at the end so that they received some insight into the Mukhtar's perspective. Finally, the situational judgment test could benefit by enhancing the quality of the video.

SOCIAL AWARENESS AND LEADER INFLUENCE: DEVELOPMENT OF CLASSROOM AND WEB BASED LEARNING INTERVENTIONS

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SOCIAL AWARENESS AND LEADER INFLUENCE: DEVELOPMENT OF CLASSROOM AND WEB BASED LEARNING INTERVENTIONS

Introduction

Overview

In the current operational environment, the need for socially-aware and influential leaders at all levels in the military has become increasingly apparent. During Operation Enduring Freedom, military leaders found they were fighting a different kind of war in an unfamiliar culture with a dispersed, yet tenacious, enemy. Subsequent efforts in Iraq, increased operational tempo, a high degree of uncertainty, and the need to constantly shift tactics and approaches have all contributed to an environment in which leader social awareness, adaptability, and influence skills are required for mission success.

The need for additional leader social awareness, adaptability, influence, and related skills has been well-documented. For example, the Army Leadership Development and Training Panel (ATLDP; Department of the Army, 2001) concluded that adaptability and self-awareness are critical skills for leaders. Similarly, Horey, Fallesen, Morath, Cronin, Cassella, Franks, and Smith (2004) included social influence (both within and beyond the chain of command) and awareness of self as components of their Army leader competency model. Wong, Gerrars, Kidd, Pricone, and Swengros (2003) also describe six metacompetencies that are necessary for strategic leadership in the Army's future, four of which are related to the concepts of self-awareness and adaptability (and by extension social influence): identity, mental agility, cross-cultural savvy, and interpersonal maturity. Additionally, the importance of influence in Army doctrine is emphasized in the Army Leadership field manual (FM 6-22, p.1-2), which positions influence firmly at the foundation of leadership, indicating that, "Leadership is the process of influencing people by providing purpose, direction, and motivation while operating to accomplish the mission and improving the organization." However, despite the increased need for socially aware leaders who are skilled in influencing others, little formal training exists to ensure leaders are properly trained in these skill sets.

To address this training gap, the Ft. Leavenworth Research Unit of ARI (ARI-FLRU) initiated research in May of 2005 on the topic of "Social Awareness and Influence on Others." The goal of this initial research was to develop a training concept that would accelerate leader development through exposure to structured experiences in self-awareness, self-modulation, and techniques to enhance leader social influence supported by real-time measurement, coaching, and feedback.

PDRI, with sub-contractor ICF International led efforts to investigate the social awareness and influence process. Specifically, the research team conducted an extensive literature review to develop and document a model of social awareness and influence based on an analysis of relevant research. The research team developed a methodology to pilot test the training concepts for the different linkages in the model. The results from this effort were then summarized in a

technical report that provides preliminary evidence of the efficacy of the social awareness and influence training concepts (Mueller-Hanson, Swartout, Morewitz et al., 2007).

The follow-on research project described in this report was initiated by ARI-FLRU to extend understanding of the social awareness and influence process and to provide refined tools to support Army leader development. The specific objectives of this follow-on work were to 1) develop a more comprehensive and detailed program of instruction, 2) initiate a web-based platform program of instruction to train and enhance social awareness, self-regulation, and social influence skills, and 3) evaluate the program and provide a detailed proof of concept and design for web implementation as a program of instruction.

This report details the results of this follow-on work. It is organized into four main sections. First, the introduction presents a summary of the prior research. Second, the methodology section documents how the project was carried out. Third, the results section reports data from the pilot tests. Finally, the discussion section presents implications of these results.

Background

The initial project (Mueller-Hanson, et al., 2007) led to the development of a model of social awareness and influence (see Figure 1) including the factors hypothesized to impact this process. The model defines social awareness as the ability of an individual to correctly recognize how he or she is perceived and the ability to alter one's behavior accordingly. As such, this concept is closely related to the concept of interpersonal adaptability (Pulakos, Arad, Donovan, & Plamondon, 2000). White et al., 2005 defined interpersonal adaptability as "adjusting what one says and does to make interactions with other people run more smoothly and effectively. This includes trying to understand the needs and motives of other people – especially people in other cultures" (p.3). According to this model an influence attempt occurs in three phases: the planning phase, the interaction phase, and the in-the-moment awareness phase.

During the Planning Phase the influencer identifies his or her influence goal, evaluates the situation, and decides upon an initial influence strategy. Planning may occur prior to the interaction or at the point of first meeting. The Interaction Phase refers to the actual interaction between the influencer and the target of their influence attempt. During this phase, the influencer uses one or more tactics to influence the target. The target interprets the meaning of these tactics and has a verbal and nonverbal reaction to the influence attempt. During the final phase, the In-the-Moment Awareness Phase, the influencer perceives the target's reaction, analyzes it to interpret its meaning, and evaluates that interpretation against the original influence goal. If the influencer concludes that the goal is met, the influence attempt may conclude

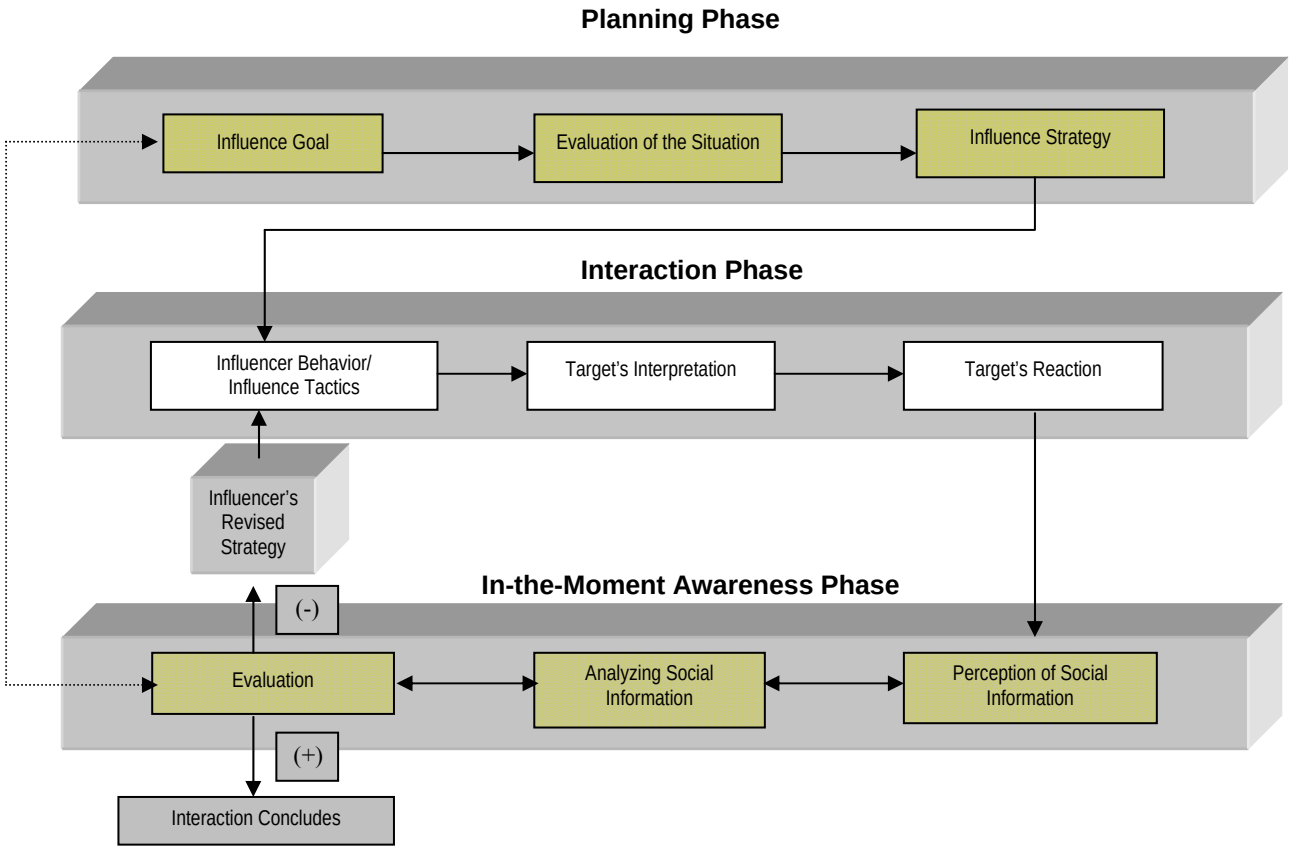

Figure 1. A Model of Social Awareness and Influence

If the goal has not been met, the influencer will need to adjust his or her approach to try a different influence tactic. This process may continue in an iterative fashion until an agreement is reached or until the parties are at an impasse.

Using the model described above, a group of subject matter experts was asked to rate factors that might affect this model in terms of their likely impact and suitability as training topics. The results of the expert rating task revealed that experience (both as a leader and with the target), knowledge of non-verbal behavior and cultural norms, communication/persuasion skills, political skills, social intelligence, metacognition, and self-awareness were the factors that were most likely to have a high impact on the social awareness and influence process and that could potentially be improved through training. Consequently, several training concepts were identified: knowledge of the social awareness and influence process, knowledge of/skill in reading verbal and non-verbal cues of others, and knowledge of/skill in using influence tactics. Using a combination of commercially available tools and customized content, a six-hour social awareness and influence training program was developed. This program was then pilot-tested with 72 Company Grade Officers and Non Commissioned Officers (NCOs).

The pilot investigation served a dual purpose. First, the pilot tested the various training concepts to determine their suitability for ongoing use. Second, the pilot was useful in making some initial determinations about whether social awareness and influence skills could be

improved through training. Evaluation data were collected at two levels to assess the effectiveness of the training: participant reactions (level 1) and acquisition of new knowledge and skills (level 2). The level 1 evaluation was conducted using a survey administered at the end of each training session. A pre-post test design was used to conduct the level 2 evaluation. Participants were assessed via a test of nonverbal sensitivity and a role-play exercise both before and after the training. These assessments evaluated students on their ability to read verbal and non-verbal cues and on adjusting their own behavior to more effectively influence others.

Results of the participant reactions questionnaire indicated that the training program was well received by the target audience. Participants reported that the role-plays and instruction on influence tactics were the most useful components of the course. Results of the pre-post tests provided evidence that training was successful in helping participants improve their skills in the following areas:

- Clearly communicating an influence goal,
- Adjusting behavior in response to a target's reactions, and
- Influencing others for compliance and commitment

The results of this initial research made three significant contributions. First, based on a review of the literature, a viable model of in-the-moment social awareness and influence was developed. Second, this research provided support for the notion that social awareness and influence are skills that can be enhanced through training. A third contribution of this project is the development of customized behavioral observation measures to evaluate role-play performance, which was useful in both student assessment and training.

Outline of Current Project

The initial results (Mueller-Hanson, et al., 2007) suggested that the classroom program of instruction (POI) was useful in developing social awareness and influence skills. However, these results also suggested that there were several ways in which the course could be improved, including:

- Revise organization of the POI to better follow the Model of Social Awareness and Influence
- Enhance role-plays to include examples from SMEs and examples appropriate to NCOs and officers
- Include additional case studies and examples
- Revise influence tactics exercises to focus on military examples
- Eliminate some of the commercial measures used in the course (i.e., the PONS and SETT), as they have limited utility in this setting and were not well-received by the target audience
- Standardize the assessments – perhaps with the assistance of technology

Additionally, ARI-FLRU was interested in developing a prototype web-based version of the POI. Web-based training (WBT) offers the promise of delivering learning interventions to a distributed workforce in a cost-effective manner. The U.S. Army has recently made computer-based learning a priority because of the need to deliver training to troops wherever they are deployed. Computer-based learning, or e-learning, may offer other benefits as well such as increases in learner engagement and motivation. In fact, it has been argued that young adults, members of the tech-savvy generation, prefer the interactivity offered by computer-based training and are "turned off" by traditional training methods (Prensky, 2001).

Despite the appeal of e-learning, there is no consensus on the extent to which technology can be used instead of traditional classroom training. For example, a recent review conducted by the U.S. Navy urged caution in the use of instructional games (Hays, 2005). According to this review, evidence supporting the effectiveness of computer-based instructional games is fragmented. While e-learning may be ideal for acquiring declarative knowledge, it is not clear whether it is useful in developing interpersonal and leadership skills. Moreover, unless the training employs learning checks and assessments, it may be difficult to determine the extent to which trainees are attending to the material. Despite these barriers, the likely long-term cost effectiveness and logistical benefits to e-learning make it important to explore its potential for training a wide variety of skills.

With these caveats in mind, the purpose of this effort was twofold. First, the effort sought to revise and pilot test the classroom POI. Second, the effort was to develop and pilot test a companion prototype web-based POI and associated assessments to determine their suitability for ongoing use. A key component of this research was to explore whether technology-enabled training would have a positive impact on developing leader social awareness and influence skills and whether the benefits of WBT offset the costs of less interaction. The methodology used to develop and pilot test the enhanced classroom POI and the prototype web-based POI is presented in the next section.

Method

Revisions to the Classroom Course

As a starting point for developing the full training POI, it was necessary to develop a measurement model based on the theoretical model of Social Awareness and Influence (see Figure 1) and research conducted in the initial project (Mueller-Hanson et al., 2007). This model draws from the principles of Evidence-Centered Design (Mislevy, Steinberg, Almond, & Lukas, 2006), in which the assessment development process includes an articulation of what is assessed, behaviors that indicate proficiency of what is assessed, and the knowledge and skills that relate to these behaviors. The measurement model includes the behavioral definitions of each major phase of the social awareness and influence process, behaviorally-based criteria that can be used to assess success in each phase, and the associated knowledge and skills that are believed to predict these criteria. Developing this model was critical to the training development process because it helped in identifying specific learning objectives for the course. This model is presented in Table 1.

Table 1. Social Awareness and Influence Measurement Model

Behavioral Definition	***Criteria for Success***	***Associated Knowledge and Skills***
Planning Phase		
♦ The influence goal is explicitly defined ♦ The influencer scans the current environment to identify important aspects to consider when planning how he or she will influence the target ♦ The influencer plans an overall approach or strategy for the influence attempt	♦ The goal is clearly stated, includes a measurable outcome, and is clearly linked to the problem (i.e., it will solve the issue at hand) ♦ Important factors (i.e., the factors most likely to impact the influence attempt) are identified and the potential impact of these factors is assessed ♦ The plan incorporates important factors and is designed to achieve the goal	♦ Situational awareness ♦ Cultural awareness ♦ Self-awareness ♦ Past experience with/knowledge of target
Interaction Phase		
♦ The influencer attempts to accomplish his or her goal by using one or more influence tactics (the actual behaviors demonstrated by influencer during the interaction with the target) ♦ The target perceives and interprets the influencer's message ♦ The target provides a reaction to the influence attempt	♦ Influence tactics are appropriate to the situation ♦ Tactics contribute to meeting the goal	♦ Knowledge of influence tactics ♦ Communication/ persuasion skills and experience

Behavioral Definition	*Criteria for Success*	*Associated Knowledge and Skills*
In-the-Moment Awareness Phase (Perceiving and Analyzing Steps)		
♦ The influencer perceives the target's response and analyzes it to determine its meaning	♦ The influencer correctly identifies the target's reaction (i.e., influencer and target have a shared view of what the target is feeling) ♦ The influencer correctly interprets the meaning of the target's reaction (i.e., the influencer and target both have a shared understanding of the beliefs and motives that underlie the target's reaction)	♦ Knowledge of verbal and nonverbal cues ♦ Past experience with/knowledge of the target ♦ Cultural awareness ♦ Social perception
In-the-Moment Awareness Phase (Evaluating Step)		
♦ The influencer compares his/her interpretation of the target's reaction with the initial influence goal ♦ If the influencer determines that the influence goal has been met, the interaction may conclude ♦ If the influencer determines that the goal has not been met, he or she may try different influence tactics in an attempt to be more effective	♦ The influencer makes an appropriate choice given the situation (e.g., concludes interaction if goal is met, tries a different approach if the goal is not met)	♦ Emotional regulation ♦ Metacognition
In-the-Moment Awareness Phase (Adjusting Behavior Step)		
♦ Using the information from the previous steps, the influencer changes the way s/he interacts with the target to be more effective ♦ The influencer continues to assess the target's reaction and make additional adjustments as needed	♦ In response to a sub-optimal reaction from the target, the influencer uses a different approach ♦ The new approach is more effective than the old approach (i.e., brings the influencer closer to achieving his/her goal)	♦ Self-awareness ♦ Self-regulation

Behavioral Definition	*Criteria for Success*	*Associated Knowledge and Skills*
Influence Outcome		
♦ Commitment: Internal agreement to the request and persistence in carrying it out ♦ Compliance: Outward agreement to the request but no indication of long-term commitment ♦ Resistance: Refusing, arguing, delaying, or otherwise avoiding completing the request	♦ Target's stated compliance or rejection to the request ♦ Target's actual behavior in following through to carry out the request ♦ Target's stated commitment to the request ♦ The manner in which the target carries out the request (e.g., target's description of the request to others; whether the target overcomes obstacles to ensure the request is carried out or finds excuses to not complete the task)	♦ Social awareness skills ♦ Influence skills

A second priority in revising the training program was to gather additional examples for the revised POI. To this end, a series of focus groups were conducted at several different posts (total N=94) to gather critical incidents and examples that could be used to enhance the role-plays and vignettes included in the course. Focus group participants included enlisted ranks ranging from Staff Sergeant through Master Sergeant and officer ranks ranging from Second Lieutenant to Captain. Group sizes ranged from 8-12 individuals. In these sessions, participants first took a short version of the original Social Awareness and Influence course. Then they were asked to provide examples from their own experience of times when they had to influence peers, supervisors, subordinates, host-nation personnel, and others outside their chain of command. Participants were told that these examples would be used to refine the course materials in the future. Additionally, Soldiers were asked to review and comment on the course content, including existing role-plays and to make suggestions for improvements.

Using the measurement model as a guide, the course objectives were refined to incorporate the recommendations identified from the focus groups and the Phase I research. The course objectives for the final course are presented in Table 2. Using these objectives as a guide, the course contents were then revised accordingly.

Table 2. Course Learning Objectives

Terminal Learning Objective
♦ Condition: Given an influence objective and a role-play scenario ♦ Action: Persuade a target to agree to carry out your request ♦ Standard: Success will be assessed through satisfactory ratings on a behavioral observation checklist
Enabling Learning Objectives
♦ Introduction: - Describe the relationship between influence and leadership - Provide an example of how influence skills can affect leadership effectiveness - Define the term "social awareness" - Describe the relationship between social awareness and influence - Describe the three types of outcomes possible in an influence attempt ♦ Pre-interaction Phase: - Identify three types of influence goals - Describe three environmental factors that should be considered when planning an influence attempt and how these factors impact goal selection and influence strategy - Describe the seven power bases and how these might impact the selection of an influence strategy ♦ Interaction Phase - Given a list of influence tactics and their definitions, describe when each tactic is appropriate to use and the potential benefits and drawbacks of each - Given a list of influence tactics and a discussion topic, demonstrate at least six separate tactics ♦ In-the-moment Social Awareness Phase - Describe the basic verbal and nonverbal cues associated with the following emotions (happiness, sadness, anger, fear, surprise, disgust, and contempt) - Describe the fundamental attribution error and how this error impacts the accuracy of interpretations of other's verbal and nonverbal cues - Describe how cultural biases can impact judgment about others and how these biases can be mitigated - In the context of an influence attempt, demonstrate four techniques for modifying behavior in response to negative reactions from a target

An outline of the course contents is presented in Table 3. The course materials are available as an ARI Research Product (Mueller-Hanson, et al., 2008). Course materials include lecture slides and notes, student materials, and exercise materials. Exercises include role-plays, video case studies, and other activities.

Table 3. Course Outline

Activities	Time	Sample Agenda
I. Course Overview		
A. Introduction/Welcome/ Overview of Session	10 minutes	0900-0910
II. Module 1: The Importance of Social Awareness and Influence	**20 minutes**	**0910-0930**
III. Module 2: Planning Phase		
A. Influence Goals	5 minutes	0930- 0935
B. Evaluation of the Situation	15 minutes	0935- 0950
• Practice Case Study: Clean-up Crew		
BREAK	**10 minutes**	0950- 1000
C. Cultural Considerations (Values Scale)	20 minutes	1000- 1020
E. Selecting an Influence Strategy	5 minutes	1020- 1025
F. Practice Case Study	10 minutes	1025- 1035
IV. Module 3 – Interaction Phase		
A. Influence Tactics		
• Rational Persuasion- Apprising	15 minutes	1035- 1050
BREAK	**10 minutes**	1050- 1100
• Practice Activity	15 minutes	1100- 1115
• Appeal to Higher Authority - Blocking	15 minutes	1115- 1130
• Practice Activity	15 minutes	1130- 1145
LUNCH	**1 hr 15 min**	**1145- 1300**
B. Target's Interpretation and Reaction	30 minutes	1300- 1330
• Case Study Example of Fundamental Attribution Error		
V. Module 4 – In-the-moment Awareness Phase		
A. Perceiving, Analyzing, and Evaluating Social Information	20 minutes	1330- 1350
BREAK	**10 minutes**	**1350- 1400**
B. Case Study	20 minutes	1400- 1420
C. Summary	10 minutes	1420- 1430
D. Role-play Exercise (Note: break mid way through)	45 minutes	1430- 1515
VI. End of Course Assessments		
A. Assessments: SJT / Knowledge Test	40 minutes	1515- 1555
B. Course Evaluation	5 minutes	1555- 1600

Development of the WBT Prototype Course

In developing the WBT prototype, we took a medium-tech approach rather than a high-tech approach. Following the recommendations of Clark and Mayer (2008), course content is presented in a fashion that emphasizes the learning objectives and de-emphasizes extraneous content that is provided for entertainment only and that may distract the learners from the purpose of the lesson. The WBT development process entailed the following steps:

Define requirements. As the target audience for this training was unknown at the time of development, the requirements had to remain open-ended to fit a wide array of users with potentially different processor speeds, firewalls and other security measures, screen sizes, and connection speeds. Therefore, file sizes were kept small to accommodate slow connection speeds. Additionally, because data needed to be captured to evaluate the training, a web-based platform was chosen over a CD-ROM format because it would be easier to capture the data with the course contents integrated with a learning management system (LMS).

Storyboard content. During the storyboarding process, the classroom contents were transferred into screenshots of the text, graphics, and pictures that would appear on each screen. All photos presented in the WBT program are courtesy of the U.S. Army, and many were taken from the U.S. Army website.

Program content using a rapid prototyping approach. All content with the exception of the role-play was developed using Flash CS3 and published for Flash Player 8. The role-play was developed using Adobe Captivate. The content was integrated into Moodle, an open-source LMS. Moodle was chosen because of its flexibility, ease of use, ability to capture data, and ability to bookmark pages so that users could exit the program at any time and return where they left off. After each module was storyboarded, it was sent to the web-design team for programming. After the content was programmed, it was sent back to the instructional design team for review and testing. Based on this review, changes were made as necessary and the content was integrated into Moodle for further testing. This approach allowed for rapid development of the content.

Pilot test content. Initial pilot tests were conducted with five Industrial/Organizational psychologists and Instructional Systems Design (ISD) specialists who had not participated in the training development process. Revisions were made based on the results of these initial tests. Pilot testing with Soldiers is described in the next section.

Development of the Measures

The following measures were developed as assessments to be used in either the classroom course and/or the WBT course:

The Social Awareness and Influence Skills Self-assessment

A knowledge test

A situational judgment test (SJT)

A web-based role-play

A description of each of these measures and the process used to create them is presented below.

Social Awareness and Influence Skills Self-assessment. The Social Awareness and Influence Skills Self-assessment is a 20 item self-report measure of one's social awareness and influence skills. A paper version of this assessment is available for the classroom course and a web-enabled version is available for the WBT. The purpose of this assessment is twofold. First, it provides feedback to students on their perceptions of their social awareness and influence skills. This feedback helps to raise self-awareness and further engage students in the course contents. The second purpose is research. The assessment enables comparisons between self-assessments and more objective assessments of social awareness and influence skills.

The assessment items were developed by the project team to reflect each aspect of the social awareness and influence measurement model. All members of the team had extensive experience researching the topics of social awareness and influence and used relevant literature to generate the items. Respondents answer each question on a five point Likert scale ranging from Strongly Disagree to Strongly Agree.

Knowledge Test. The Knowledge Test is a 20-item multiple choice exam that is based on the contents of the course. A paper version of this assessment is available for the classroom course and a web-enabled version is available for the WBT. The purpose of the knowledge test is to assess whether students have learned important concepts presented in the course. The Knowledge Test was written by the course developers and includes items that address each of the course modules. This test was developed after the classroom course was piloted, so data are only available for the web-based sample.

SJT. The situational judgment test (SJT) includes a video-based scenario with 20 multiple choice questions. A paper version of the questions is available for the classroom course, and a web-enabled version is available for the WBT. The video scenario begins with a brief overview of the influence scenario, followed by several multiple choice questions. Next, four video segments of dialog between two characters (an influencer and a target) are presented; each followed by several multiple choice questions. The purpose of the SJT is to assess the extent to which students demonstrate social insight in a complex interpersonal interaction. Specifically, the SJT was designed to assess the students' ability to effectively plan an influence attempt, interpret the reactions of a target, evaluate these reactions against the influence goal, and make decisions about how to interact with the target to accomplish the influence goal. The SJT was developed based on the Social Awareness and Influence Measurement Model presented in Table 1.

The scenario chosen for the SJT was a downward influence attempt. In the scenario, a new lieutenant is trying to get buy-in and support from one of his NCOs in handling a performance problem with one of the corporals in the unit. Although the lieutenant recognizes that he can use his authority to deal with the performance issue, he recognizes that getting the NCO's support for his decision is important to preserving the morale of the unit and ensuring his plan is actually carried out in an effective manner. The scenario and responses were developed based on input from Solider SMEs who participated in the focus groups described above. This scenario was chosen because the Soldier SMEs reported that downward influence is a challenging problem faced by junior leaders.

The SJT script was filmed using digital photography to capture still photos that represented the facial expressions of the two characters. Stock photos of Army personnel in Iraq were used for the introduction. Voice-over narration was used to capture the introduction text and the dialog between the two characters. Each question in the SJT links back to a particular step in the measurement model, and the response options are scaled (using expert judgments) to indicate the effectiveness of each option.

Eight Industrial/Organizational psychologists with extensive experience in social awareness and influence research served as the SMEs for scaling the response options. The SMEs rated each response in the level of insight and judgment that the response indicated. Specifically, raters reviewed each item on the SJT and were instructed to, "*Rate each option (in terms of how accurate or effective that option is) for each question, using the following scale: 1 = poor social insight and judgment, 2 = a minimal amount of social insight and judgment, 3 = a moderate degree of social insight and judgment, 4 = a very high degree of social insight and judgment.*" The mean of these eight ratings for each response option was used to develop the scoring system for the SJT. For example, if a participant selected response option *a* and that response option had a mean rating of 3.80; the participant would receive 3.80 points for that question. The points would then be summed to compute a final score on the SJT.

This scoring scheme was applied to determine scores for the participants in a classroom pilot test conducted in June of 2007 (see the next section for details). Following this pilot test, more detailed analyses were conducted to refine the items and scoring for the web-based version of the SJT. To refine the scoring for the web-based version of the SJT, first the highest and lowest SME ratings for each option were dropped from analysis, leaving six ratings for each option (Weekly, Ployhart, & Holtz, 2006). This was done to eliminate outliers. Next, we tested rater agreement.

To test the agreement of the SME ratings, the Average Deviation Index (ADI) (Burke, Finkelstein, & Dusig, 1999) was computed for each response option. The ADI is the mean of the absolute deviations of the responses from the mean.[1] This index measures the extent to which respondents agree in their ratings of the response options, and it was used to adjust the items that had response ratings with low agreement. Response options that had an ADI greater than .67 were considered problematic based on Burke and Dunlap's (2002) recommendations. Burke and Dunlap demonstrated that dividing the number of response categories by six would result in a value that corresponded roughly to a reliability of .70. In this case this would result in a cutoff of .67, given that there were four potential ratings for each option. We removed responses with ADI values above .67 from their respective items.

These criteria resulted in several adjustments to the SJT items. Option E was removed from question 3, option D was removed from question 10, option C was removed from question 14, option A was removed from question 16, and option D was removed from question 18. Since there was poor agreement on 4 of the 5 response options for question 7, question 7 was removed

[1] Note: see Burke and Dunlap (2002) for a thorough explanation of the ADI and the merits of this index in comparison with other methods of measuring interrater agreement.

from the scoring of the SJT but was kept in the test for continuity.[2] All of the remaining items and response options showed adequate agreement among expert raters and were therefore included in the final version of the test. Point values for each option were calculated using the mean of the six SME ratings after the adjustments described above. The results from these analyses and the final point values used to calculate SJT assessment scores are presented in Table 4.

Table 4. Agreement Indices and Final Scores for SJT test items

Item Response Option	ADI	Response Option Point Value	Item Response Option	ADI	Response Option Point Value
1A	.28	3.83	**11A**	.56	1.83
1B	.28	2.17	**11B**	.28	3.83
1C	.44	2.67	**11C**	.44	1.67
1D	.67	1.50	**11D**	.44	1.67
1E	.44	1.67	**11E**	.00	1.00
2A	.50	2.50	**12A**	.00	4.00
2B	.50	1.50	**12B**	.28	2.17
2C	.44	2.67	**12C**	.28	1.17
2D	.00	4.00	**12D**	.44	1.67
2E	.28	1.83	**12E**	.44	1.33
3A	.00	1.00	**13A**	.00	4.00
3B	.44	1.33	**13B**	.44	2.67
3C	.28	3.83	**13C**	.28	3.17
3D	.33	2.00	**13D**	.44	1.33
3E	.83	0.00	**13E**	.00	1.00
4A	.44	2.67	**14A**	.28	1.17
4B	.00	4.00	**14B**	.50	2.50
4C	.28	1.83	**14C**	.83	0.00
4D	.00	1.00	**14D**	.28	3.83
4E	.33	2.00	**14E**	.44	3.33
5A	.44	2.33	**15A**	.67	1.67
5B	.50	2.50	**15B**	.67	3.50
5C	.00	4.00	**15C**	.33	2.00
5D	.00	1.00	**15D**	.44	2.67
5E	.67	1.67	**15E**	.28	1.17
6A	.00	1.00	**16A**	.83	0.00
6B	.67	2.67	**16B**	.44	1.67
6C	.44	1.67	**16C**	.00	4.00
6D	.56	1.83	**16D**	.00	1.00
6E	.28	3.83	**16E**	.50	1.50

[2] Note: question 7 asked respondents to indicate what one of the characters in the scenario would likely do next, and it is probably that not enough information about the characters had been provided yet at that point in the video. Subsequent repetitions of the same questions at later points in the video yielded better results.

Item Response Option	ADI	Response Option Point Value	Item Response Option	ADI	Response Option Point Value
7A	.89	0.00	**17A**	.67	1.50
7B	.78	0.00	**17B**	.56	3.17
7C	.89	0.00	**17C**	.67	3.33
7D	.83	0.00	**17D**	.67	3.33
7E	.50	0.00	**17E**	.44	2.67
8A	.28	1.17	**18A**	.28	2.83
8B	.33	2.00	**18B**	.00	4.00
8C	.44	2.33	**18C**	.00	1.00
8D	.28	1.17	**18D**	.78	0.00
8E	.00	4.00	**18E**	.00	1.00
9A	.67	3.33	**19A**	.00	4.00
9B	.28	1.17	**19B**	.44	2.33
9C	.44	3.67	**19C**	.00	1.00
9D	.28	1.17	**19D**	.44	1.33
9E	.00	1.00	**19E**	.00	1.00
10A	.00	1.00	**20A**	.00	1.00
10B	.44	2.67	**20B**	.00	1.00
10C	.56	2.17	**20C**	.33	2.00
10D	.78	0.00	**20D**	.50	3.50
10E	.28	3.83	**20E**	.44	3.67

Note: Items with high ADI values and low r_{wg} values are shaded.

Web-based Role-Play. The web-based role-play represents the automation of one of the live-action role-plays used in the classroom course. The purpose of the web-based role-play was to assess the extent to which students demonstrate social insight in a complex interpersonal interaction. Specifically, the web-based role-play was designed to assess the students' ability to effectively plan an influence attempt, interpret the reactions of a target, evaluate these reactions against the influence goal, and make decisions about how to interact with the target to accomplish the influence goal. It includes a video-based scenario with several multiple choice questions. The role-play begins with a brief video providing an overview of the influence scenario followed by several multiple choice questions. Next, the student engages in a dialog with the central character, an Iraqi Mukhtar. After each statement by the Mukhtar, the student is offered 2-4 response options from which to choose. The scenario branches, such that the students are presented with different dialog from the Mukhtar and different subsequent response options depending on the response option selected. The web-based role-play was developed based on the Social Awareness and Influence Measurement Model presented in Table 1.

The scenario selected for the web-based role-play was an influence attempt based upon examples obtained in the focus groups with subject matter experts described earlier; this helped to make the role-play as realistic as possible. Role-plays have been identified as a meaningful way of teaching interpersonal skills (Ahamer, 2004; Shortridge & Sabo, 2005; Nelson & Blenkin, 2007) as well as measuring the success of influence attempts (Yukl, Kim, & Chavez, 1999). Web-based role-plays have also been argued to be beneficial in developing interpersonal

skills (Olson-Buchanan, Drasgow, Moberg, Mead, Keenan, & Donovan, 1998). Web-based role-plays may be particularly useful in the assessment and development of interpersonal skills because they do not have the problems of low interrater reliability associated with more traditional role-plays because they can be presented in a standardized format that has more realism than paper and pencil assessments (Olson-Buchanan et al., 1998).

Similar to the SJT, the video for the role-play was filmed using digital photography to capture still photos of an actor playing the part of the Mukhtar in order to convey emotional cues through facial expressions and body language. Voice over narration was used to capture each response by the Mukhtar as well as to provide a detailed explanation of the scenario before the role-play began. After presenting an introduction to the scenario that was accompanied by pictures of the geographical area in which the scene took place, participants were asked a few questions to measure the degree to which they understood the situation from the description provided. These included questions related to the identification of their primary goals as well as the factors that would be most important for them to consider during the role-play.

Similar to other web-based role-plays (Olson-Buchanan, 2002; Olson-Buchanan et al., 1998) branching was used extensively. In a branching role-play, the assessment branches to images and audio that provide feedback to the participant based upon the action that he/she has selected (Olson-Buchanan, 2002). At critical points in the role-play (following responses from the Mukhtar) the role-play would be stopped and participants would be provided with written descriptions of four different response options. Based upon the Social Awareness and Influence Measurement Model each response option reflected varying degrees of two factors: (1) a reflection of the degree of awareness of the emotions expressed by the Mukhtar, and (2) the type of influence tactic selected for achieving their objective (tactics ranged in appropriateness for the situation as based upon the Social Awareness Model). Typically, three to four types of responses were possible: high social awareness and a highly appropriate influence tactic, high social awareness and a less appropriate tactic, low social awareness and a highly appropriate tactic (optional), and low social awareness and an inappropriate tactic.

The role-play was designed in such a manner that the response selected by the participant would determine the feedback that he/she received from the Mukhtar as well as future response options that would be available. Thus, the scenario changed based upon the responses selected by the participant; each Mukhtar clip was a direct result of the response option selected by the participant. Based upon whether an individual selected a “correct” or “incorrect” response they would receive a different follow-up screen. However, regardless of what response options were selected each participant was asked to select a response at 18 different points in the role-play. While it was likely that participants received distinctly different follow-up scenes with their accompanying response choices, it was also possible to recover from an initial “mistake” by making subsequent “correct” decisions that would lead the participant to the same scene reached by an individual making more “correct” decisions. Similarly, a participant could initially make a “correct” decision and still receive the same scene as someone consistently making “poor” choices if they subsequently selected “incorrect” response options. This was important in order to make the role-play as realistic as possible; in actual influence attempts it is possible to achieve one’s objectives even if initial attempts fail (and vice versa).

The scoring of web-based role-plays using branching can be particularly problematic (Olson-Buchanan, 2002; Drasgow, Olson-Buchanan, & Moberg, 1999; Olson-Buchanan et al., 1998). Specifically, a decision has to be made on how to assign points to the response option selected in a follow-up scene that is presented based upon an earlier "correct" response, versus one that would be presented based upon an earlier "incorrect" response (Olson-Buchanan, 2002). This issue was addressed in a similar manner to other computer based role-plays by using a clean slate approach to determine scoring (Drasgow et al., 1999; Olson-Buchanan et al., 1998). In a clean slate approach, each response option selected by a participant is scored independently of any of his or her other selections. In this case, each response received a score from zero to two; a zero was assigned to responses reflecting *neither* social awareness nor the selection of an appropriate tactic, a one was assigned to those options reflecting *either* social awareness *or* the selection of an appropriate tactic, and a two was assigned to options reflecting *both* social awareness and the selection of an appropriate tactic. The scoring of all response options was determined by agreement between three industrial/organizational psychologists familiar with the model of Social Awareness who were familiar with the dimensions (emotional awareness, influence tactic appropriateness) that the scoring was based upon. Any disagreements were addressed through the rewording of response options as necessary.

Finally, a regional expert, Dr. Alma Abdul-Hadi Jadallah, reviewed the role-play in its entirety before production began and provided extensive guidance on the script and response options. Olson-Buchanan et al. (1998) argued that in order to use model-based scoring as we have done that it is necessary for each branch to be realistic and congruent with the model that will be used for scoring. This was accomplished through the cultural review and the review of all response options by the Industrial/Organizational psychologists familiar with the social awareness model. As a result, a model-based scoring scheme was used.

Reliability was not calculated for this assessment of the WBT, which is not uncommon for role-plays that employ the use of branching (Olson-Buchanan, 2002; Drasgow et al., 1999; Olson-Buchanan et al., 1998). Namely, each scene of the role-play with the associated response options is not viewed by every participant. As a result, because participants do not each receive the same exact items, it is inappropriate to calculate a coefficient alpha value for this assessment (Olson-Buchanan, 2002). Similarly, it is not feasible to calculate test-retest reliability because participants are likely to select different response options from one testing session to another, and thus be presented with a different set of items. At present there does not appear to be an agreed upon method that is feasible for assessing reliability on adaptive assessments; this is an area that has been identified as being important for future research as a result (Olson-Buchanan, 2002). While the use of IRT could be useful in the design of a branching role-play, the decision to use model based scoring and the fact that there was not a sufficient sample size of role-play scenes or participants made this infeasible for this project. As a result, no reliability estimates are reported for the web-based role-play.

Pilot Testing

Classroom POI. The final revised classroom POI was pilot tested at location 1 in June of 2007 with a total of 48 enlisted Soldiers and officers. Demographic information for this sample is provided in Tables 5, 6, and 7. The pilot test included the following components:

1. The purpose of the pilot test was explained and Soldiers signed privacy act statements.
2. Soldiers completed the Skills Self-Assessment.
3. Soldiers completed the video-based SJT. In half of the classes, the students were randomly assigned to take the criterion measure (Corporal Bennett SJT), which served as a pre-test. The other half were assigned to take another video-based SJT that served as a filler activity.
4. Course contents were presented as described in the outline in Table 1.
5. Soldiers completed the SJT post-test. The Soldiers who had completed the filler activity in the morning completed the Corporal Bennett SJT and the Soldiers who had completed the Corporal Bennett SJT in the morning completed the filler activity.
6. Soldiers completed the post-course reactions questionnaire and were released.

WBT POI. The final web-based POI was pilot tested at location 2 in May of 2008 with a total of 41 officers. Demographic information for this sample is provided in Tables 5, 6, and 7. Each team of students was randomly assigned to the training condition or the control condition. In the training condition, participants completed the web-based course (which included the Social Awareness and Influence Skills Self-assessment) and then the post-course reactions questionnaire. Then participants completed three criterion measures: the knowledge test, the SJT, and the online role-play. In the control condition, participants completed the criterion measures first, followed by the training course. In one of the control sessions, access to the web-site containing the training contents was temporarily disrupted due to technical difficulties. Therefore, 9 participants were unable to complete the training. Participants completed the training and assessments at their own pace. The time to complete the training and assessments ranged from 4-5 hours.

Table 5. Rank of Samples

	WBT (Location 2)				**Classroom Training (Location 1)**			
	Control Group		**Training Group**		**Control Group**		**Training Group**	
Rank	**Freq**	**Valid %**	**Freq**	**Valid %**	**Freq**	**Valid %**	**Freq**	**Valid %**
Private First Class	0	0	0	0	0	0	1	3.9%
Specialist	0	0	0	0	0	0	9	34.6%
Sergeant	0	0	0	0	1	4.6%	5	19.2%
Staff Sergeant	0	0	0	0	9	40.9%	1	3.9%
Sergeant First Class	0	0	0	0	4	18.2%	0	0
Second Lieutenant	1	5%	0	0	2	9.1%	0	0
First Lieutenant	10	50%	7	33.3%	3	13.6%	0	0
Captain	6	30%	11	52.4%	3	13.6%	10	38.5%
Major	3	15%	3	14.3%	0	0	0	0

Results

Descriptive statistics for the classroom group variables are presented in Table 8. Correlations among relevant variables in the classroom group are presented in Table 9. Descriptive statistics for the classroom group variables are presented in Table 10. Correlations among relevant variables in the classroom group are presented in Table 11. Significant findings are discussed in more detail in the sections that follow.

As noted previously, the classroom based course and web-based course were developed a year apart. Therefore, while the self-assessment and SJT content and questions were the same in both versions, the knowledge test and scored role-play were only available for the web-based sample.

Table 6. Descriptive Statistics of Classroom Sample Variables

	N	Min	Max	*M*	*SD*	Alpha
Social Awareness and Influence Self-Assessment (Influence Scale)	48	20	48	36.60	6.01	.78
Social Awareness and Influence Self-Assessment (Social Awareness Scale)	48	23	46	35.56	4.41	.72
Social Awareness and Influence Self-Assessment (Total Score)	48	50	93	72.17	9.39	.85
Total SJT Score	43	48.18	72.93	64.75	5.07	n/a

Table 7. Correlations Among Classroom Sample Variables

	Rank	Influence Scale	Social Awareness Scale	Self-Assessment Total
Social Awareness and Influence Self-Assessment (Influence Scale)	0.19			
Social Awareness and Influence Self-Assessment (Social Awareness Scale)	**0.37**	**0.62**		
Social Awareness and Influence Self-Assessment (Total Score)	**0.29**	**0.93**	**0.86**	
Total SJT Score	**0.35**	**0.36**	**0.47**	**0.45**

Note: scores in bold are statistically significant, $p < .05$.; $N = 48$ for Self-Assessments and 43 for SJT

Table 8. Descriptive Statistics of Web-based Sample Variables

	N	Min	Max	*M*	*SD*	Alpha
Social Awareness and Influence Self-Assessment (Influence Scale)	41	23	50	37.68	5.58	.85
Social Awareness and Influence Self-Assessment (Social Awareness Scale)	41	26	48	37.80	4.69	.78
Social Awareness and Influence Self-Assessment (Total Score)	41	49	98	75.49	9.98	.91
Total SJT Score	41	49.67	71.98	64.63	4.17	n/a
Total Knowledge Test Score	41	9	20	14.17	3.29	.70
Total Role-Play Score	33	33	43	38.21	2.77	n/a

Table 9. Correlations Among Online Sample Variables

	Rank	Influence Scale	Social Awareness Scale	Self-Assessment Total	Total SJT Score	Total Knowledge Test Score
Social Awareness and Influence Self-Assessment (Influence Scale)	.04					
Social Awareness and Influence Self-Assessment (Social Awareness Scale)	.02	**.89**				
Social Awareness and Influence Self-Assessment (Total Score)	.03	**.98**	**.97**			
Total SJT Score	.03	.06	.17	.12		
Total Knowledge Test Score	.11	.13	.11	.13	.11	
Total Role-Play Score	**-.44**	.04	.13	.08	**.37**	-.07

Note: scores in bold are statistically significant, $p < .05$. $N = 41$ for the Self-Assessments and knowledge test and 33 for the role-play.

Participant Satisfaction

Summaries of participant responses on the course evaluation questionnaires for both the classroom course and the WBT prototype are provided in Tables 12, 13, 14, and 15. Responses to general satisfaction questions in Table 12 were on a five-point Likert Scale (5 = Strongly Agree; 1 = Strongly Disagree). Responses in Table 13 were regarding the difficulty of the course

contents, and responses in Table 14 were regarding the length of the course. A summary of open-ended comments is presented in Table 15. Complete results of satisfaction questionnaires are provided in Appendix A (classroom) and Appendix B (WBT).

Table 10: Satisfaction Ratings

	Classroom		WBT	
	M	*SD*	*M*	*SD*
This course helped me to better understand the importance of social awareness and influence to Army leaders.	4.10	.692	4.09	.689
This course helped me to learn more about my own strengths and weaknesses related to social awareness and influence.	4.00	.684	3.91	.818
This course helped me to better understand the social awareness and influence process.	4.15	.618	4.28	.683
This course helped me to better recognize and accurately interpret verbal and nonverbal cues from others.	3.96	.713	3.84	.860
This course taught me how to change my own behavior to more effectively interact with other people.	3.88	.733	3.72	.851
This course helped me to become a better influencer.	3.92	.739	3.78	.906
Overall, I believe that what I learned in this course will help me to be a better leader.	4.06	.727	4.13	.707
Overall, I believe this course was worthwhile.	4.10	.831	4.12	.751
I'm planning to use what I learned in this course in future interactions with other people on the job.	4.19	.680	4.19	.821

Table 11. Difficulty of Course Contents

	Classroom		WBT	
	Frequency	Valid Percent	Frequency	Valid Percent
Too complex or difficult	2	4.3%	0	0
Too basic or simple	4	8.5%	4	12.5%
Appropriate – neither too basic nor too complex	41	87.2%	28	87.5%

Table 12. Length of Course

	Classroom		WBT	
	Frequency	Valid Percent	Frequency	Valid Percent
Too long for the amount of material presented	4	8.5%	4	12.5%
Too short for the amount of material presented	1	2.1%	3	9.4%
Appropriate – neither too long nor too short	42	89.4%	25	78.1%

Table 13. Summary of Open-Ended Comments

What was the most useful part of the course and why?	***What was the least useful part of the course and why?***
Classroom	
♦ Role-plays and scenarios ♦ Tips on influence tactics ♦ Discussion ♦ Learning more about social awareness and influence	♦ Videos ♦ Power-Point Slides ♦ Facial expressions
WBT	
♦ Realistic military examples and vignettes ♦ Scenarios ♦ Learning checks ♦ Useful content	♦ Taking the course on-line instead of classroom (e.g., sometimes made it hard to stay engaged; missed discussion) ♦ Lack of audio in the course ♦ Technical glitches (e.g., slow downloads; program freezing)

Criterion Measures

Knowledge Test. In the WBT sample, the mean score on the knowledge test was 16.19 (*sd* = 2.94) for the training group and 12.05 for the control group (*sd* = 2.09). This difference was significant ($t = 5.17$, $df = 39$, $p<.001$). Thus the manipulation check was successful; those in the training group acquired significantly more knowledge related to the course content than those in the control condition.

SJT. The mean score on the SJT for classroom training was 65.06 (*sd* = 5.22) for the group that took the SJT as a pre-test measure and 64.47 (*sd* = 5.04) for the group that took the SJT as a post-test measure. This difference was not statistically significant. On closer examination, it appeared that the SJT results were correlated with rank, and the ranks were not

evenly distributed between these two groups. Therefore, these two groups differed in an important way and were not equivalent, making pre-post comparisons problematic. A follow-up ANCOVA to control for the effects of rank showed that rank rather than group membership accounts for nearly all the variance in performance [$f(1,45) = 6.241$, $p=.016$ for rank and $f(1, 45) = .014$, *ns* for group]. However, the small sample size and wide dispersion of ranks in the classroom sample makes this finding difficult to interpret.

In the WBT sample, the mean score on the SJT was 63.85 ($sd = 3.78$) in the training group and 65.49 ($sd = 4.49$) in the control group. These two scores are not significantly different. In this sample, the SJT scores were not correlated with self-reported skills, knowledge test results, or rank. However, SJT scores were correlated with role-play performance (see Table 10).

Web-based Role-Play. Results for the web-based role-play scores were somewhat problematic because 20% of respondents were missing data (final $n = 33$); it is not clear whether this data was missing due to an electronic error in the data collection process or whether these participants simply did not complete the role-play. Therefore, analyses were only conducted on the respondents who had complete data. No significant differences were observed between scores in the control group ($m = 38.89$, $sd = 2.17$) and the training group ($m = 37.4$, $sd = 3.25$). However, as shown in Table 10, there was a significant difference in role-play performance by rank – in the opposite direction that might have been predicted based on the results of the classroom group. That is rank and role-play performances were negatively correlated such that lower ranking individuals tended to score higher on the role-play than higher ranking individuals. A follow-up ANCOVA to control for the effects of rank showed that rank rather than group membership accounts for nearly all the variance in performance [$f(1,30) = 5.749$, $p=.023$ for rank and $f(1, 30) = 1.21$, *ns* for group].

Discussion

Given the importance of social awareness and influence skills to Army leaders, ARI sponsored a multi-year effort to develop a model of the social awareness and influence process and associated training programs based upon principles from this model to help Army leaders enhance their skills in these areas. As part of this effort, a classroom-based course and a prototype web-based course were developed along with assessments of social awareness and influence skills. These programs were then pilot tested with field samples of Army officers and NCOs.

The pilot studies served three major purposes: (1) to test the various training concepts to determine their suitability for ongoing use, (2) to determine if social awareness and influence skills could be reliably measured, and (3) to make some initial determinations about whether social awareness and influence skills could be improved through training. Evaluation data were collected at two levels to assess the effectiveness of the training: participant reactions (level 1) and acquisition of new knowledge and skills (level 2). The level 1 evaluation was conducted using a survey administered at the end of each training session. The level 2 evaluation consisted of a knowledge test, a situational judgment test, and a role-play assessment.

With regard to the question of the suitability of training concepts, results of the participant reactions questionnaire indicated that the training programs in both the classroom and web-based formats were well-received by the target audience. Participants in both the WBT and the classroom training reported similar satisfaction ratings. However, while individuals may have been expected to prefer WBT (Hays, 2005), 50% of the participants who completed the WBT indicated a preference for learning this content via classroom training. This is somewhat surprising given that both training formats were rated similarly by participants; it may be useful to investigate the reasons why some participants reported that they would have preferred learning the content in a classroom context. Participants in both samples indicated that the most valuable aspects of the course included the use of real-world examples and opportunities to practice skills. It appears that the training content was received equally well for the most part across both the classroom and WBT formats and participants found the same aspects of training useful in both contexts.

With regard to the measurement of social awareness skills, results indicate promise for the measures piloted in this research. The self-report measure was a reliable indicator of perceived social awareness and influence skills (average $\alpha = .78$). In the classroom sample, this measure was correlated with performance on the judgment test ($r = .45$, $p < .05$). In the web-based instruction sample, performance on the situational judgment test correlated with performance on the automated role-play ($r = .37$, $p < .05$). As these measures were prototype instruments, more research is needed to validate these results with external performance. However, it is promising that there appears to be some initial evidence of convergent validity for these skill measures

With regard to the trainability of social awareness and influence skills, results from the WBT sample indicated that individuals in the training group scored significantly higher on the knowledge test than individuals in the control group. Differences in situational judgment test scores and role-play scores were not significant between the two groups. However, in Phase I of this research (Mueller-Hanson et al., 2007) significant improvements were observed in person to person role-play performance before and after the training when the training was presented in the classroom. At first glance, it may appear puzzling why skills were improved for the first classroom sample but not in the second classroom sample. However, the role-play assessment used with the first classroom sample is very different from the video-based SJT used in the present project. It may be that success in the SJT is more related to cognitive ability than success in the live role-play, which could in-part account for the differences in results.

One possible conclusion from the findings in the current project is that a short online training program is not sufficient for building new skills, but it is useful in developing knowledge. Therefore, WBT such as the program described here may be most useful as pre-work to prepare students for more intensive, scenario-based training in a classroom setting, which is a better forum for building skills. Another possibility is that the person to person and web-based role-play assessments differ in what they are measuring. It is also possible also that Soldiers with different levels of education and experience may respond differently to different training formats. While these possibilities future consideration, the small sample sizes and wide dispersion of ranks available for our data collection makes it difficult to draw firm conclusions. Therefore, it would be fruitful to examine the relative knowledge and skills acquired in classroom and WBT training within a given rank (or narrow band of ranks) with larger samples

and to look at how knowledge and skill acquisition may differ for different levels of education and experience.

With regard to the suitability of WBT for leadership and interpersonal skills development, it may be unreasonable to expect the development of such complex skills in such a short period of time. This may be one reason why even though participants seemed equally pleased with the WBT as participants with the classroom training, half the participants who completed the WBT indicated a preference for the classroom format. These participants may have been pleased with the training they received, but they may have recognized that they may have not had the opportunity to develop these skills in the same manner they might have in the classroom. In any event, there appears to be value in both training formats. The WBT can more easily be administered to a large number of individuals and, as discussed, can facilitate the development of knowledge related to influence and social awareness. It may be best to follow such training with a more traditional classroom based training that can focus more extensively upon the enactment of the skills necessary for influence and social awareness.

Conclusions and Limitations

Several conclusions may be drawn from this research. First, the Social Awareness and Influence Model provides a useful framework for research. Several hypotheses may be drawn from this model and tested empirically. For example, one's ability to assess a situation may be related to one's ability to choose an appropriate influence goal to fit that situation. Additionally, research could investigate the factors of the situation that are most likely to be recognized. Unfortunately, the small sample sizes available for the pilot testing prohibited more thorough testing of the model. It would be useful to test the model more thoroughly in future research.

Second, the Social Awareness and Influence Model provides a useful framework for training social awareness and influence skills. Students reported that the model helped them to think about how they interact with others in a more structured way. As one individual put it, "I knew some of these things already, but you've given me some additional techniques and a more organized way to help me think about how I influence others." Instructors also observed that the model's linear steps provided an easy way to explain the concepts to the students in a clear and logical fashion.

A third conclusion is that blended solutions may provide optimal mix of training for interpersonal knowledge and skills. Technology based learning can be a useful way to provide foundational concepts and then test for comprehension. Classroom time can then be spent engaged in deliberate practice and feedback to reinforce the concepts taught in the earlier online modules. A blended solution may be particularly useful for field settings where classroom time is very limited. Technology-based training modules may also be helpful for National Guard or Reserve troops as they prepare to serve temporarily on active duty.

A fourth conclusion is that automated assessments have promise for measuring interpersonal and leadership skills but more research is needed to establish the validity of these assessments. For example, results from the SJT and role-play were encouraging, but resource limitations prevented us from collecting additional data to compare scores on these measures to more

objective assessments of social awareness and influence skills. A larger sample and external comparisons are needed to fully validate these assessments.

A final conclusion is that effective technology-based solutions need not be costly to develop. In developing the WBT Prototype, a "medium tech" approach was taken rather than a high tech approach to keep the development costs low. For example, rather than hiring professional actors and video production crews to produce expensive video for the SJT and role-play assessment, still photos were used to capture appropriate images and recorded corresponding audio to develop a slide show that combines the photos with voice-over narrative. Although students may react more positively to training that is highly entertaining, there is no evidence to suggest that such expense is needed to promote learning. In fact, it has been argued that training that is too flashy actually takes away from the educational value of the material (Clark & Mayer, 2008).

Next Steps and Future Directions

The findings from this research suggest that the prototype WBT POI offers promise and could benefit from further enhancements – either as a stand-alone training program or when integrated into a blended solution. Based on the results of the pilot tests, specific recommendations for enhancing the WBT program and assessments include:

- Adding 6-8 new learning interactions to reinforce important concepts.
- Increasing animation on some of the lecture content by including additional fade-ins and pop ups on 15-20 slides.
- Adding some sound/narration to up to 50% of the slides in the training modules. Note that this narration would not simply repeat the contents of the slide. Rather, it would involve providing a summary of key points, narrating some of the vignettes, and providing additional examples and learning points.
- Adding some feedback to the role-play exercise so that participants receive a debriefing on the Mukhtar's perspective. This would tie the experience with the Mukhtar back to the content of the course and help improve metacognitive skills.
- Developing an avatar coach for use during the Mukhtar role-play to provide some additional coaching and feedback throughout the exercise. In this case, the automated role-play would be used primarily as a learning tool rather than as an assessment device.
- Enhancing the quality of the video in the SJT, this would entail reshooting the videos by taking more still photos and re-recording the narration.

References

Ahamer, G. (2004). Negotiate your future: Web-based role-play. *Campus-Wide Information Systems, 21*(1), 35-58.

Burke, M. J., & Dunlap, W. P. (2002). Estimating interrater agreement with the Average Deviation Index: A User's Guide. *Organizational Research Methods, 5,* 159-172.

Burke, M. J., Finkelstein, L. M., & Dusig, M. S. (1999). On average deviation indices for estimating interrater agreement. *Organizational Research Methods, 2,* 49-68.

Clark, R. C., & Mayer, R. E. (2008). E-Learning and the science of instruction (2nd ed). San Francisco: Pfeiffer.

Department of the Army (2001). *The Army Training and Leader Development Panel Officer Study Report to the Army*, http://www.army.mil/atld.

Drasgow, F., Olson-Buchanan, J.B. & Moberg, P.J. (1999). Development of an interactive video assessment: Trials and tribulations. In F. Drasgow & J.B. Olson-Buchanan (Eds.), *Innovations in computerized assessment* (pp. 177-196). Hillsdale, NJ: Erlbaum.

Hays, R. T. (2005, November). The effectiveness of instructional games: A literature review and discussion. Orlando, FL: Naval Air Warfare Center Training Systems Division (TR # 2005-004).

Horey, J., Fallesen, J. J., Morath, R., Cronin, B., Cassella, R., Franks, Jr., W., & Smith, J. (2004). *Competency based future leadership requirements.* Technical Report 1148. Arlington, VA: U.S. Army Research for the Behavioral and Social Sciences.

Mislevy, R.J., Steinberg, L.S., Almond, R. G., & Lukas, J.F. (2006). Concepts, terminology, and basic models of evidence-centered design. (15-47). In D.M. Williamson, R.J. Mislevy & I.I. Bejar, Automated scoring of complex tasks in computer-based testing. Mahway, NJ: Lawrence Erlbaum Associates.

Mueller-Hanson, R.A., Swartout, E.C., Morewitz, C.L, Keil, C.T., McGonigle, T. P., Martin, C., Parish, C. & Morath, R. A. (2007). *Social Awareness and Leader Influence: A Proposed Model and Training Intervention* (Institute Report # 1874). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Mueller-Hanson, R.A., Swartout, E.C., Nelson, J.K., & Garven, S. (2009). *Social Awareness and Influence Workshop Materials* (ARI Research Product 2009-01). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Nelson, D.L. & Blenkin, C. (2007). The power of online role-play simulations: Technology in nursing education. *International Journal of Nursing Education Scholarship 4*(1), 1-12.

Olson-Buchanan, J.B. (2002). Computer-based advances in assessment. In F. Drasgow & N. Schmitt (Eds.) *Measuring and analyzing behavior in organizations* (pp. 44-87). San Francisco: Jossey-Bass, Inc.

Olson-Buchanan, J.B., Drasgow, F., Moberg, P.J., Mead, A.D., Keenan, P.A. & Donovan, M.A. (1998). Interactive video assessment of conflict resolution skills. *Personnel Psychology, 51,* 1-24.

Pulakos, E. D., Arad, S., Donovan, M. A., & Plamondon, K. E. (2000). Adaptability in the workplace: Development of a taxonomy of adaptive performance. *Journal of Applied Psychology, 85*, 612-624.

Prensky, M. (2001). Digital game-based learning (on-line version). New York: McGraw-Hill.

Shortridge, A. & Sabo, G. (2005). Exploring the potential of web-based social process experiential simulations. *Journal of Educational Multimedia and Hypermedia, 14*(4), 375-390.

U.S. Army. (2006). Army *Leadership: Competent, confident, agile* (FM No. 6-22). Headquarters, Department of the Army.

Weekley, J. A., Ployhart, R. E., & Holtz, B. C. (2006). Scaling, scoring, and developing situational judgment tests. In J. A. Weekley & R. E. Ployhart (Eds.), *Situational Judgment Tests,* pp. 157-182. Lawrence Erlbaum.

White, S. S., Mueller-Hanson, R. A., Dorsey, D. W., Pulakos, E. D., Wisecarver, M.M., Deagle, E.A., & Mendini, K. (2005). *Developing adaptive proficiency in Special Forces Officers* (Institute Report #1831). Arlington, VA: U.S. Army Research Institute for the Behavioral and Social Sciences.

Wong, L., Gerrars, S., Kidd, W., Pricone,, & R. Swengros, R. (2003, September). *Strategic Leadership Competencies.* Paper developed for the Strategic Studies Institute in the U.S. Army War College.

Yukl, G., Kim, H., & Chavez, C. (1999). Task importance, feasibility, and agent influence behavior as determinants of target commitment. *Journal of Applied Psychology,* 84(1), 137-143.

Appendix A: Complete Results from Student Reactions Questionnaire (Classroom)

	Min	Max	*M*	*SD*
1. This course helped me to better understand the importance of social awareness and influence to Army leaders.	1	5	4.10	.692
2. This course helped me to learn more about my own strengths and development needs related to social awareness and influence.	2	5	4.00	.684
3. This course helped me to better understand the social awareness and influence process.	2	5	4.15	.618
4. This course helped me to better recognize and accurately interpret verbal and nonverbal cues from others.	2	5	3.96	.713
5. This course helped me to better change my own behavior to more effectively interact with other people.	2	5	3.88	.733
6. This course helped me to become a better influencer.	2	5	3.92	.739
7. Overall, I believe that what I learned in this course will help me to be a better leader.	2	5	4.06	.727
8. The instructors effectively facilitated this course.	3	5	4.56	.542
9. The course materials were organized and easy to use.	2	5	4.46	.651
10. Overall, I believe this course was worthwhile.	2	5	4.10	.831
11. I'm planning to use what I learned in this course in future interactions with other people on the job.	3	5	4.19	.680

Note: $N = 48$.

12. The difficulty level of the material presented in this course was:

	Frequency	Valid Percent
Too complex or difficult	2	4.3%
Too basic or simple	4	8.5%
Appropriate – neither too basic nor too complex	41	87.2%

13. The length of this course was:

	Frequency	Valid Percent
Too long for the amount of material presented	4	8.5%
Too short for the amount of material presented	1	2.1%
Appropriate – neither too long nor too short	42	89.4%

14. What was the most useful part of the course and why?

- I enjoyed the practical exercise role-plays with peers. Very useful.
- Role-playing. It allowed the class to practice new techniques and approaches.
- Influence tactics. Gives others options and ideas for use.
- Instructions on the ways to influence.
- Final performance exercises (role-plays).
- Practical Exercises and "Role-playing"
- Influence tactics
- Different vocabulary skill, different body language
- Teaming up because we used what we were learning
- Knowledgeable Instructors
- Going over the different types of influences
- About the verbal and nonverbal
- Visual aides because it gave us a visual understanding on what they were talking about
- The scenarios helped build on skills
- It was all good
- How to talk to people to accomplish your goals
- Negotiation techniques
- Introduction to words I've never heard of. It makes you think about how you talk to people.
- Role-playing. Being serious and interacting with the material.

- The open discussion
- To be a better influence
- Great instructors really helped
- The instruction of changing tactics while trying to influence
- It was good learning. Don't know if I would ever us it! Civilian based not military.
- I learned more about social awareness, things I didn't know
- Performance exercises (role-plays) let the students execute what they know
- Presenting various influencing techniques
- Face and verbal reactions, understand what people are thinking
- All of it
- Role-playing
- Different tactics!
- Visual aides, training aides
- Learned a lot of things I didn't know
- Influence tactics
- Understanding what tools are available to help influence others
- The scenarios, hands on training is always best
- The accelerated performance exercises (role-plays)
- Identifying different influences
- Influence model/exercises
- Going over the different influence models, explaining what each one was, strengths and weakness, and how to properly apply them.
- Identifying the different influencing tactics and how to recognize when to alter them
- Role-playing scenarios help understands why this types of training is necessary and how often it can be used
- The scenarios
- Planning influence tactics prior to trying to influence someone
- The different scenarios that were used in the partner exercises really helped me understand the material presented

15. What was the least useful part of the course and why?

- Umm… can't think of one.
- Cultural dimensions self-assessment. It was not tied in very well with the rest of the course.
- Beginning Power-Point Deluge
- The video scenarios
- Military to military influence
- Army Reference, a person with no influence would not gain skills from a single day course
- Nothing
- It was all good.
- The video
- Last slide show – it was lame.
- The slide video
- Learning body language of people

- Study Guide is all that's needed
- Most of us already use this information
- All good information.
- Everything was good.
- The movies
- Nothing really
- Part about facial expressions. I think it is common knowledge?!
- The last video. I felt it was beneath the audience level of experience. Been through this scenario before.
- Much of the book information not really talked about (in class). Maybe useful later.
- Video exercise was too easy
- Communication sergeant – most of us already know most
- The repetition of slides

16. Other comments/suggestions:

- Kudos to Erin and Cody! Have a safe flight back.
- Need to have free coffee available when instructing officers
- Remove from context of Army, too many variables (or at least acknowledge the variables) to gain a pure understanding of social influences.
- Make it more days
- The way they talked was a little too technical for some understanding. Could understand, but just too technical.
- Good training
- Probably better for officers
- Better videos
- Great job.
- Use NCO videos for NCOs and officer videos for officers
- Class was too long
- More practice on applying new techniques of influence
- Good course
- Well planned and executed class and good flow of material presented
- The course was really good
- I think the course could be streamlined to fit a six hour block of instruction
- Excellent course
- Great instructors very well explained and taught
- More audience involvement and less PowerPoint slides. The military see these quite often
- Good course, well taught and well paced. Very informative
- Good workshop and outstanding presentation

Appendix B: Complete Results from Student Reactions Questionnaire (WBT)

	Min	Max	*M*	*SD*
1. This course helped me to better understand the importance of social awareness and influence to Army leaders.	2	5	4.09	.689
2. This course helped me to learn more about my own strengths and weaknesses related to social awareness and influence.	2	5	3.91	.818
3. This course helped me to better understand the social awareness and influence process.	2	5	4.28	.683
4. This course helped me to better recognize and accurately interpret verbal and nonverbal cues from others.	2	5	3.84	.860
5. This course taught me how to change my own behavior to more effectively interact with other people.	2	5	3.72	.851
6. This course helped me to become a better influencer.	2	5	3.78	.906
7. Overall, I believe that what I learned in this course will help me to be a better leader.	2	5	4.13	.707
8. The web-based interface was effective in delivering the material in this course.	1	5	3.75	1.078
9. Instructions were easy to understand and follow.	3	5	4.25	.508
10. The overall look and feel of the course was engaging.	1	5	3.87	.907
11. Navigating through the course was easy.	1	5	4.16	.920
12. The course was easily accessible.	1	5	4.25	.842
13. The practice questions and activities were relevant and reinforced learning.	3	5	4.16	.515
14. Overall, I believe this course was worthwhile.	2	5	4.12	.751
15. I'm planning to use what I learned in this course in future interactions with other people on the job.	2	5	4.19	.821
16. This course helped me to better understand the importance of social awareness and influence to Army leaders.	2	5	3.97	.861

Note: $N = 32$.

17. The difficulty level of the material presented in this course was:

	Frequency	Valid Percent
Too complex or difficult	0	0
Too basic or simple	4	12.5%

Appropriate – neither too basic nor too complex	28	87.5%

18. The length of this course was:

	Frequency	Valid Percent
Too long for the amount of material presented	4	12.5%
Too short for the amount of material presented	3	9.4%
Appropriate – neither too long nor too short	25	78.1%

19. If you were going to take a course like this in the future, which format would you prefer?

	Frequency	Valid Percent
Online	11	34.4%
Traditional Classroom Setting	16	50%
No Preference	5	15.6%

20. What did you like most about the course and why?
    - The real examples
    - Scenarios- allowed me to understand what I read
    - The Scenarios were real-world and applicable
    - Ability to check for correct answers because it reinforced leaning objectives
    - Good content. Good organization of material and it flowed
    - The info
    - Instructor readily available for computer glitches
    - Simple
    - I liked the fact that this is part of the coursework. This is good training for every military leader.
    - The scenario
    - The subject matter because it will help me in many ways other than in my duties for the Army.
    - Check on learning and clear learning objectives
    - Summary
    - The self checks thru the lecture
    - Relevant information that I can use for my assignment.
    - It gave good examples and the material was worthwhile
    - I liked the specific influence tactics and the situations they would and would not be useful in.
    - It is a great basic course to prepare an individual for a classroom setting course.
    - How the checks on learning supported the material

- Great information and useful/appropriate real-life examples.
- Multiple checks on learning. I was efficiently challenged and not too overwhelmed by the information covered.
- Self paced
- Short, to the point
- The information on the Middle East Culture.
- The relevance to current operations. I especially enjoyed the interaction exercises with tribal leaders.
- I liked the vignettes, they seemed realistic and facilitated thinking outside of the box (chain of command, I do it because it is an order).

21. What did you like least about the course and why?
    - On-line course method
    - Undefined
    - It was difficult to be motivated to continue with this course due to the 8 times I had to restart because of technical difficulties.
    - Would prefer some audio to reinforce key topics
    - You can't teach social skills thru a computer! this would be a great prerequisite course for an actual live person teaching the subject in depth
    - It is hard to study on the computer for hours
    - Taking it after lunch, cramped classroom. Computer glitches
    - Undefined
    - This material seemed too basic. There is a great deal of in-depth work that's gone on in influential leadership. Practical exercises and group dynamic is very effective in this learning.
    - N/A
    - The online feel with no sound and no discussion style format in the lessons.
    - Not enough examples or scenarios
    - Have an audio option.
    - Too boring
    - Reading body language was too basic.....we understand when someone is bad, sad, happy , etc
    - I think distinguishing between influence/manipulation and greater discussion in ethics would be useful.
    - Some of the slides skip and the majority are slow to react on a high bandwidth connection. This means that it would undoubtedly take up more time for my Soldiers if conducted at some of their homes.
    - Lack of audio content to reinforce the written text
    - NA
    - It could have been more interactive. It became mundane after a while. The examples were exciting and seemed interactive to the point where you needed to adjust your approach to get positive results.
    - Distractions and time pressured to accomplish. It no longer become constructive to learn but to pressure to complete because others of the team members completed earlier and team member who completed earlier making negative comments why it is taking
    - No real life practical exercise

- The self evaluation
- Initial startup of online training is always problematic, this format seemed very easy though...not many settings to check for the system to operate properly.

22. Additional comments.
    - The course flowed smoothly
    - This course needs to continue to be tested so that more bugs can be worked out.
    - None
    - Would like to have heard audio in the notes. Mover video examples of topics discussed.
    - There are numerous sales and leadership training companies that conduct similar training. Reviewing their curriculum might be very helpful.
    - The use of "her" or "she" is referenced several times to indicate a response or where the idea originated. Might use "their" or "them" or "his/her" or "he/she" were it may apply.
    - Need some listening between reading.....when reading so much material it is easy to get distracted and lose focus
    - Enjoyed
    - This course is good, but should be an additional preparation not a replacement for the traditional "in house" or class room environment.
    - Long to complete. I wish I had the time to absorb the materials longer time. I believe the materials are valuable in my success or completion of my mission.
    - Practice!
    - Overall a good course.